MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

GENERAL PERMIT
FOR
CONCENTRATED ANIMAL FEEDING OPERATIONS

Permit No.: MTG010000

AUTHORIZATION TO DISCHARGE UNDER THE

MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 *et seq.*, owners and operators of concentrated animal feeding operations (CAFOs), except those CAFOs excluded from coverage in Part I of this permit, are authorized to discharge and must operate their facility in accordance with the limitations, monitoring requirements, and other provisions set forth herein. A written letter of authorization from the Department is required before an owner or operator of a CAFO is authorized to discharge under this general permit.

A copy of this General Permit and letter of authorization must be kept on site at all times.

This permit shall become effective: **November 1, 2008**

This permit and the authorization to discharge shall expire at midnight, **October 31, 2013.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: September 25, 2008

f. Prohibition of any discharge which is in conflict with a plan or amendment thereto approved pursuant to section 208(b) of the Federal Clean Water Act.

g. Any additional requirements that the Department determines are necessary to carry out the provisions of 75-5-101, et seq., MCA.

2. The discharge is different in degree or nature from discharges reasonably expected from sources or activities within the category described in the CAFO GP.

3. An MPDES permit or authorization for the same operation has previously been denied or revoked.

4. The discharge sought to be authorized under the CAFO GP is also included within an application or is subject to review under the Major Facility Siting Act, 75-20-101, et seq., MCA.

5. The point source will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301, MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132 or of wild and scenic rivers under 16 USC 1274.

D. Facilities Applying for Coverage after the Effective Date of this Permit

Owner or operator of a new or existing concentrated animal feeding operation seeking to obtain cover under this general permit must submit a complete application package to the Department at the address given below. A complete package consists of:

1. A complete application form DEQ Form 2B. The application must be signed and certified in accordance with Part V.N of this permit; and

2. The applicable application fees; and

3. A site-specific Nutrient Management Plan (NMP) using DEQ Form NMP (Appendix A). Form NMP must be completed to the satisfaction of the Department. This form must be signed and certified in accordance with Part V.N of this permit; and

4. Plans and specifications prepared by an individual qualified to design animal waste management plans and developed in accordance with the design criteria

3. Permittees covered under the August 15, 2000 General Permit (MTG010000) maintain coverage under the reissued permit unless notified by the Department that coverage has been terminated. Permit coverage may be terminated based on any of the following:

   a. Failure to submit a NMP as required by the Permit;

   b. Failure to meet the eligibility criteria of Part I.A through Part I.B of this permit; or

   c. If, upon review of an application for a general permit authorization for a concentrated animal feeding operation production area, the department discovers site-specific information that indicates that a general permit authorization is not sufficiently protective of water quality, the department shall require an individual permit.

F. Notice of Termination

The permittee may submit a request for termination in writing that is signed in accordance with Part V.N of this General Permit. The request for termination must include the following information:

1. The facility or site name and location, mailing address or geographic location of the facility or activity that is regulated under this permit;

2. The name, address, and telephone number of the owner or operator as identified on the current authorization letter;

3. The MPDES Permit Authorization Number as stated in the Permit Authorization Letter;

4. A detailed explanation and/or documentation which demonstrates and confirms that that the regulated facility or activity has been eliminated; and,

5. The request for termination must be signed and certified in accordance with the requirements in Part V.N of this General Permit. The request for termination must be sent to the following address:

Department of Environmental Quality
Water Protection Bureau
P.O. Box 200901

PART II. EFFLUENT LIMITATIONS AND OTHER CONDITIONS

The following effluent limitations apply to all facilities covered by this permit:

A. Effluent Limitations and Standards – Production Area

There shall be no discharge of manure, litter, or process wastewater pollutants from the production area into state waters except as provided for below.

Whenever precipitation causes an overflow of manure, litter, or process wastewater, pollutants in the overflow may be discharged to state waters provided:

1. For new and existing dairy and cattle operations, other than veal, the production area is designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event. The applicable rainfall value for the location of the CAFO operation subject to this requirement is determined from the 25-year, 24-hour rainfall map given in Appendix C. The weather station to determine the amount of precipitation that occurs at the facility shall be specified in the permittee's authorization letter. Alternatively, the permittee has the option of maintaining a comparable precipitation gauge at the facility;

2. For new swine, poultry, and veal calf operations, the production area is designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 100-year, 24-hour rainfall event. The applicable rainfall value for the location of the CAFO operation subject to this requirement is determined from the 100-year, 24-hour rainfall map given in Appendix C. The weather station to determine the amount of precipitation that occurs at the facility shall be specified in the permittee's authorization letter. Alternatively, the permittee has the option of maintaining a comparable precipitation gauge at the facility;

3. All animal waste management systems or components constructed after February 23, 2006 conform to the standards set forth in Department Circular DEQ 9 (February 2006); and

4. The production area is operated in accordance with the additional measures and record-keeping requirements specified in Part III and IV of this permit.

B. Effluent Limitations and Standards – Land Application Area

PART III. MONITORING, REPORTING & NOTIFICATION REQUIREMENTS

A. Discharge Notification and Reporting

1. Notification Requirements

If for any reason there is a discharge of pollutants from the permitted facility, the permittee shall notify the Department orally within 24 hours from the time the permittee becomes aware of the discharge. Oral notification shall be reported to the Department's Water Protection Bureau at (406) 444-3080. If the discharge occurs on a weekend or holiday, the permittee shall leave a message describing the circumstances of the discharge.

In addition to the oral notification, the permittee shall provide a written submission to the Department with within five (5) days of the time the permittee initially becomes aware of the discharge. The written submission shall contain the following:

a. A description of the discharge and its cause, including a description of the flow path to state waters, and an estimate of the volume and duration of the discharge.

b. The period of discharge, including exact dates and times; and

c. If the discharge is from an unpermitted location (noncompliance), the steps taken or planned by the permittee to reduce, eliminate, and prevent recurrence of the discharge.

2. Monitoring and Reporting of Discharge from Production Area

In the event of any overflow or any other discharge of pollutants from the production area, including waste control structures, whether or not the discharge is authorized by this permit, the permittee shall take the following steps:

a. The permittee shall sample and analyze the discharge for the following parameters: *Escherichia coli* bacteria, total ammonia nitrogen (NH3-N plus NH4-N) as N, total nitrogen (as nitrogen [N]), total phosphorus, five-day biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. The analyses shall be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations.

B. Transfer of Manure, Litter, and Process Wastewater – Applicable to All Large CAFOs

The permittee shall maintain records of the transfer of manure, litter, and process wastewater to other persons. These transfer records shall include the following:

1. The date of transfer; and

2. The recipient's name and address; and

3. The approximate amount of manure, litter, or process wastewater transferred to other persons (gallons/tons); and

4. Verification that prior to transferring manure, litter, or process wastewater to other persons, the permittee provided the recipient of the manure, litter, or process wastewater with the most current nutrient analysis.

C. Production Area Monitoring and Recordkeeping Requirements – Applicable to Large Dairy Cow, Cattle, Veal Calf, Swine, and Poultry CAFOs

1. The permittee shall conduct routine visual inspections of the production areas. The permittee shall, at a minimum, conduct and keep records of the following:

   a. Weekly inspections of all storm water diversion devices, runoff diversion structures, and devices channeling contaminated storm water to the wastewater and manure storage and containment structure; and

   b. Daily visual inspections of all water lines, including drinking water or cooling water lines; and

   c. Weekly inspections of the manure, litter, and process wastewater impoundments. The inspection will note the level in liquid impoundments as indicated by a depth marker. All open surface liquid impoundments must have a depth marker which clearly indicates the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event, or, in the case of new swine, poultry, or veal calf operations, the runoff and direct precipitation from a 100-year, 24-hour rainfall event.

f. How application rates for manure, litter, and process wastewater were calculated; and

g. Calculations used to decide how much nitrogen and phosphorus to apply to each field; and

h. Calculations showing the total amount of nitrogen and phosphorus actually applied to each field; and

i. Explanation of how manure, litter, and/or process wastewater is land applied; and

j. Dates that the application equipment was inspected.

2. The permittee shall follow all of the applicable technical standards and procedures specified in Section 6 of Department Circular DEQ 9 (February 2006).

3. The permittee shall maintain on-site a copy of their site-specific nutrient management plan (NMP).

E. Annual Report

1. The permittee shall submit an annual report to the Department by no later than January 28th of each year. The annual report shall cover the previous calendar year, and shall be submitted to the address in Part III.G.7 of this permit.

2. The annual report must be submitted using "Form AR2", provided in Appendix B of this permit. All information requested in Form AR2 must be included, as applicable.

F. General Monitoring and Recordkeeping

1. The permittee shall maintain the following records:

a. A copy of the facility's site-specific nutrient management plan completed in accordance with the requirements specified in this permit; and

b. The results of any manure, litter, and process wastewater sampling and

3. Penalties for Tampering

The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000, or by imprisonment for not more than six months, or by both.

4. Method of Reporting Monitoring Results and Additional Monitoring by the Permittee

Monitoring results shall be reported on the appropriate discharge monitoring report (DMR) if one is provided to the permittee, by the Department. If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted on the DMR. Such increased frequency shall also be indicated.

5. Additional, Site-specific Monitoring

The permittee shall comply with any additional monitoring requirements specified by the Department, in writing, pursuant to 75-5-602, MCA of the Montana Water Quality Act.

6. Records Contents

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements; and

b. The initials or name(s) of the individual(s) who performed the sampling or measurements; and

c. The date(s) analyses were performed; and

d. The time analyses were initiated; and

e. The initials or name(s) of individual(s) who performed the analyses; and

f. The analytical techniques or methods used; and

of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit and authorization letter must be maintained on site during the duration of activity at the permitted location.

L. Inspection and Entry

The permittee shall allow the head of the Department or the Regional Administrator, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

M. Additional Monitoring May Be Required

In order to effectively monitor the discharge of wastes to state waters, the Department may require the permittee to do the following:

1. Establish and maintain records;

2. Make reports;

3. Install, use, and maintain monitoring equipment or methods, including biological monitoring techniques;

4. Sample effluents using specified monitoring methods at designated locations and intervals;

5. Provide other information as may be reasonably required by the Department.

ii. A field-specific estimate of the expected crop type and yield for each land application site, as specified in Section 6 of Department Circular DEQ 9 (February 2006); and

iii. A determination of the appropriate nutrient needs for the crops to be grown on the land application sites, as specified in Section 6 of Department Circular DEQ 9 (February 2006); and

iv. A nutrient budget, conducted as specified in Section 6 of Department Circular DEQ 9 (February 2006), in order to determine the manure application rate.

3. The completed, signed and certified copy of Form NMP constitutes the facility's NMP. A current copy of the NMP shall be kept on site and provided to the Department upon request.

4. The NMP shall be signed by the permittee in accordance with Part V of this permit, "Signatory Requirements."

5. The permittee shall amend the NMP a minimum of once every five years, in accordance with Section 3 of Department Circular DEQ 9 (February 2006). In addition, the permittee shall request a modification of the NMP whenever the permittee makes material and substantial alterations or additions to the permitted facility or activity. Substantial alterations or additions include any changes at the facility or in its operation that would render the information in the NMP either obsolete or erroneous. They do not include changes that meet the criteria for minor modifications as specified in ARM 17.30.1362. Requests for modification of the NMP shall be submitted to the Department and must include the following items.

   a. A complete, signed and certified, updated Form NMP and its supporting documents; and

   b. A letter identifying the proposed modifications and the reason(s) they are necessary; and

   c. An application fee.

   A modified NMP must be reviewed and approved by the Department.

shall be utilized in accordance with the facility's site-specific Nutrient Management Plan. The manure solids remaining on the bottom and sides of the waste treatment lagoons or waste storage ponds may remain in place if they will not pose a threat to the environment. If leaving the manure solids in place would pose a threat, the manure solids shall be removed to the fullest extent practical and either land-applied at agronomic rates or transferred to other persons in accordance with any applicable transfer requirements from Part III.B of this permit.

iv. Land Reclamation. Waste impoundments with embankments may be breached so that they will no longer impound water, and excavated impoundments may be backfilled so that these areas may be reclaimed for other uses. Waste impoundments that have water impounded against the embankment are considered embankment structures if the depth of water is three feet or more above natural ground.

(a) Embankment Impoundments. Waste shall be removed from the site before the embankment is breached. The slopes and bottom of the breach shall be stable for the soil material involved, however the side slopes shall be no steeper than three horizontal to one vertical (3:1).

(b) Excavated Impoundments. The backfill height shall exceed the design finished grade by 5 percent to allow for settlement. The finished surface shall be constructed of the most clayey material available and mounded to shed rainfall runoff. Incorporate available topsoil where feasible to aid establishment of vegetation.

v. Conversion to Fresh Water Storage. The converted impoundment shall meet all applicable state laws and regulations governing the impoundment of fresh water. When manure solids are not removed from a waste impoundment that is converted to fresh water storage, the impoundment shall not be used for fish production. Precautions (fencing and warning signs) shall be used to ensure that the pond is not used for incompatible purposes such as swimming and livestock watering until water quality is adequate for these purposes.

vi. All disturbed areas not returned to crop production shall be

PART V. STANDARD CONDITIONS

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department and the Director advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations. Except as provided in permit conditions on Part V.F of this permit, "Bypass of Treatment Facilities" and Part V.G of this permit, "Upset Conditions," nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

periods of equipment downtime or preventive maintenance; and

iii. The permittee submitted notices as required under Part V.F.2.a of this permit.

b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part V.F.3.a of this permit.

G. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part V.G.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).

2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under Part III.A of this permit, "Discharge and Noncompliance Monitoring and Reporting"; and

   d. The permittee complied with any remedial measures required under Part V.D of this permit, "Duty to Mitigate".

3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

M. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information.

N. Signatory Requirements

All applications, reports or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:

    a. The authorization is made in writing by a person described above and submitted to the Department; and

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)

3. Changes to authorization. If an authorization under Part V.N.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.N.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the

regulations.

S. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

T. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;

3. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part V.T.2 of this permit; and

4. Required annual and application fees have been paid.

U. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

1. Impose an additional assessment consisting of not more than 20% of the fee plus interest on the required fee computed as provided in 15-1-216; or

2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension

PART VI. DEFINITIONS

1. "25-year 24-hour rainfall event" means a precipitation event with a probable recurrence interval of once in 25 years as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

2. "Act" means the Montana Water Quality Act, Title 75, Chapter 5, MCA.

3. "Animal feeding operation" (AFO) means a lot or facility (other than an aquatic animal production facility) where the following conditions are met:

   a. animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and

   b. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

4. "Concentrated animal feeding operation" (CAFO) means an AFO that is defined as a Large CAFO or as a Medium CAFO by the terms of Part VI.13 or Part VI.15 of this permit, or that is designated as a CAFO by the Department. Two or more AFOs under common ownership are considered to be a single AFO for the purposes of determining the number of animals at an operation, if they adjoin each other or if they use a common area or system for the disposal of wastes (40 CFR 122.23(b)(2)).

5. "Department" means the Montana Department of Environmental Quality.

6. "Director" means the Director of the Department of Environmental Quality or his/her designee.

7. "Discharge Monitoring Report" (DMR) means the Department's uniform form for the reporting of self-monitoring results by permittees.

8. "Discharge of pollutants" means any addition of any pollutant or combination of pollutants to state waters from any point source (ARM 17.30.1304(16)).

9. "EPA" means the United States Environmental Protection Agency.

m. 5,000 ducks (if the AFO uses a liquid manure handling system).

14. "Manure" is defined to include manure, bedding, compost and raw materials or other materials commingled with manure or set aside for disposal.

15. "Medium concentrated animal feeding operation" (''Medium CAFO''). The term Medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

a. The type and number of animals that it stables or confines falls within any of the following ranges:

i. 200 to 699 mature dairy cows, whether milked or dry;

ii. 300 to 999 veal calves;

iii. 300 to 999 cattle other than mature dairy cows or veal calves. "Cattle" includes but is not limited to heifers, steers, bulls and cow/calf pairs;

iv. 750 to 2,499 swine each weighing 55 pounds or more;

v. 3,000 to 9,999 swine each weighing less than 55 pounds;

vi. 150 to 499 horses;

vii. 3,000 to 9,999 sheep or lambs;

viii. 16,500 to 54,999 turkeys;

ix. 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;

x. 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;

xi. 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;

xii. 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); or

only if the standards are promulgated in accordance with section 306 within 120 days of their proposal; or

c. after the publication of proposed pretreatment standards under section 307(c) of the federal Clean Water Act which will be applicable to such source if such standards are thereafter promulgated with that section, provided that:

i. the building, structure, facility or installation is constructed at a site at which no other source is located;

ii. the building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

iii. the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

d. construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of "c," "i," or "iii" but otherwise alters, replaces, or adds to existing process or production equipment.

e. construction of a new source as defined under this section has commenced if the owner or operator has:

i. begun, or caused to begin as part of a continuous on-site construction program;

(a) any placement, assembly, or installation of facilities or equipment; or

(b) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials. The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included is the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities (40 CFR 122.23(b)(8)).

23. "Regional Administrator" means the administrator of Region VIII of the United States Environmental Protection Agency, which has jurisdiction over federal water pollution control activities in the state of Montana.

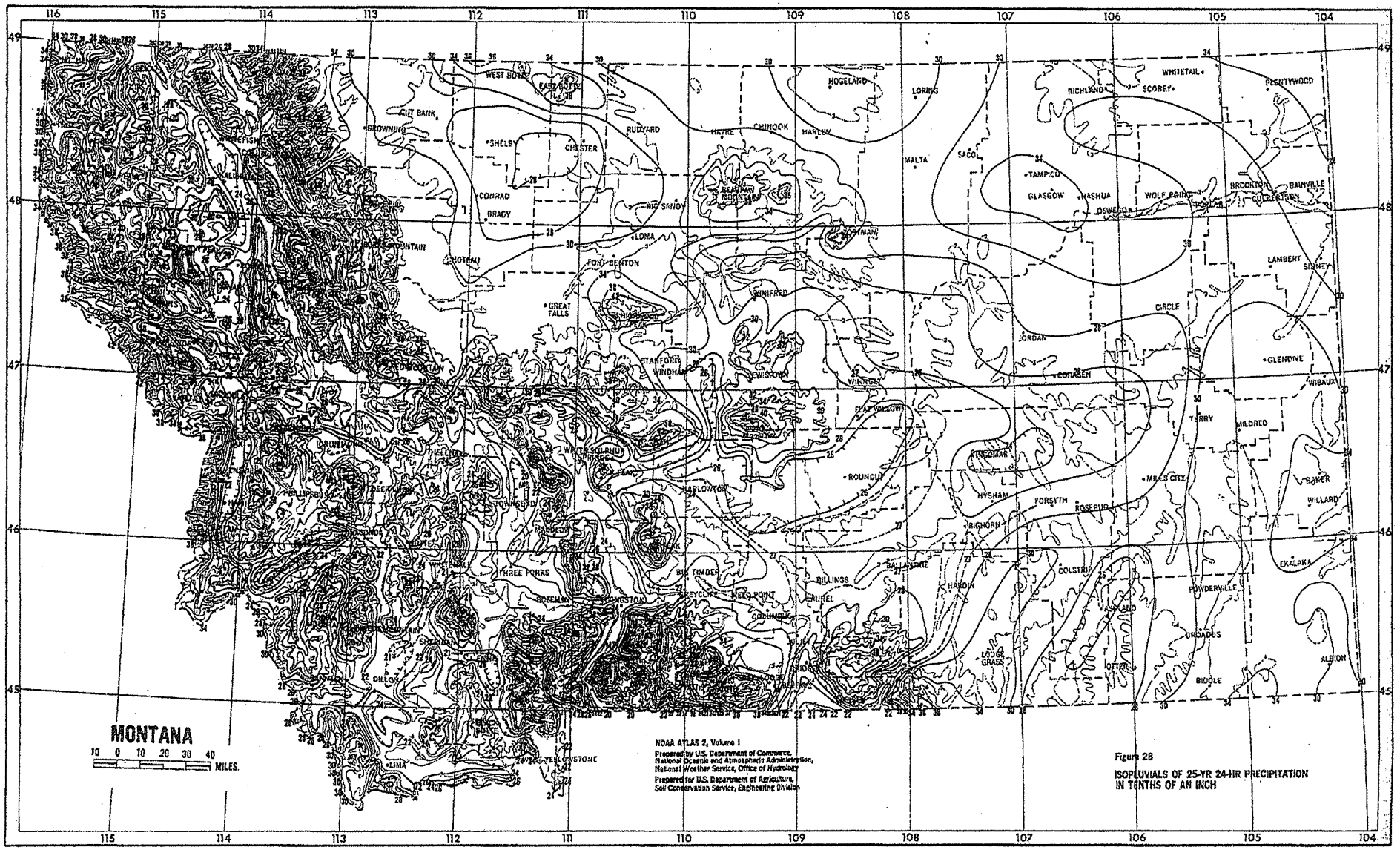
24. "State waters" or "waters of the state" means a body of water, irrigation system, or drainage system, either surface or underground. The term does not apply to the following:

    a. Ponds or lagoons used solely for treating, transporting, or impounding pollutants.

    b. Irrigation waters or land application disposal waters when the waters are used up within the irrigation or land application disposal system and the waters are not returned to state waters.

25. "Toxic pollutant" means any pollutant listed as toxic pursuant to section 1317(a)(1) of the federal Clean Water Act and set forth in 40 CFR Part 129.

Isopluvials of 25-year 24 hour precipitation in tenths of an inch.



Montana Department of
ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU

Agency Use
Permit No.:
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM
AR2

CAFO Annual Report Form

This form is to be completed by all Concentrated Animal Feeding Operations (CAFO) authorized under a Montana Pollutant Discharge Elimination System (MPDES) permit. This form must be completed, signed, and submitted to the Department by the 28th day of January following each year in which a CAFO has MPDES discharge coverage. Please read the attached instructions before completing this form. You must print or type legibly; forms that are not legible or are not complete or are unsigned will be returned. Do not leave blank spaces; if a question is not applicable put an 'NA' in the space provided. If additional space is needed, the permittee may attach additional pages with specific reference to the section of the form being elaborated on. You must maintain a copy of the completed form for your records. Blank copies of this form are available at: www.deq.mt.gov.

Section A - Permit Authorization Number for Facility: MT _ _ _ _ _ _ _

Section B - Facility or Site Information *(See instruction sheet.):*

Site Name _____

Site Location _____

Section C - Permittee (Owner/Operator) Information:

Owner or Operator Name _____

Mailing Address _____

City, State, and Zip Code _____

Phone Number ( ) _____

Section D - Type and Number of Animals:
Report the maximum number of each type of animal confined at this facility at any one time during the 12 month reporting period.

TYPE	NUMBER IN OPEN CONFINEMENT	NUMBER HOUSED UNDER ROOF
Mature Dairy Cows		
Dairy Heifers		
Veal Calves		
Other Cattle		
Swine (55 lb. or more)		
Swine (under 55 lb.)		
Horses		
Sheep or Lambs		
Turkeys		
Chickens (broilers)		
Chickens (layers)		
Ducks		
Other (specify):		

Section E - Manure, Litter and Process Wastewater

Waste Production

Estimate the amount of manure, litter and process wastewater generated by your facility during the last calendar year.

a. Liquid/Slurry manure, litter and process wastewater _____ Gallons.
b. Dry manure and litter _____ Tons.

Waste Transfer

Estimate the amount of manure, litter, and process wastewater transferred from your facility, to other persons, during the last calendar year.

a. Liquid/Slurry manure, litter and process wastewater _____ Gallons
b. Dry manure and litter _____ Tons.

Land Application

a. Report the total number of acres of land that are covered by this facility's Nutrient Management Plan (NMP), developed in accordance with the applicable technical standards and minimum elements in DEQ 9. Include all land application acres covered by the NMP, whether or not they were used for land application during the calendar year covered by this report. _____ Acres.
b. Report the total number of acres, under the control of the CAFO, that were actually used for land application of manure, litter, or process wastewater in the past calendar year covered by this report. _____ Acres.
c. Was the current version of this facility's Nutrient Management Plan developed or approved by a certified nutrient management planner? ☐ Yes ☐ No

Section F - Discharge Summary

Summary of Manure, Litter, and Process Wastewater Discharges from the Production Area

Provide a summary of each discharge of manure, litter, and/or process wastewater from the production area that occurred in the past calendar year covered by this report. Attach additional sheets, if needed.

Date	Time	Volume

Section G - CERTIFICATION

Permittee Information: This form must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
B. Title (Type or Print)	**C. Phone No.**
D. Signature	**E. Date Signed**

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

INSTRUCTIONS FOR
Form AR2 – CAFO Annual Report Form

Who Must Complete This Form?
This form must be completed by all permittees authorized to discharge under the MPDES, CAFO General Permit or an individual MPDES, CAFO permit. This form must be completed, signed, and submitted to the Department by the 28th day of January following each year in which the permittee has permit coverage. The permittee should review his or her permit and authorization letter to identify any additional reporting requirements.

*Do **not** leave blank spaces; if a question does not apply, put "NA" in the space provided. Enter the information as requested; do **not** write "same as Section XYZ" or "see above."* Please type or print legibly; applications that are not legible will be returned. Please review this form and its associated instructions well in advance of the date by which it must be completed and submitted to the Department. If, after reviewing the form and instructions, you still have questions regarding how to fill out the form, please contact the Water Protection Bureau at (406) 444-3080.

Section A – Permit Authorization Number for Facility:
Provide the MPDES permit number for the facility.

Section B – Facility or Site Information:
The "Site Name" must be identical to the facility name indicated on your most recently submitted permit application. The "Site Location" must be identical to the facility location indicated on your most recently submitted permit application.

Section C – Permittee (Owner/Operator) Information:
The information in Section C of the AR2 form must be identical to the information you provided in Section C of your most recently submitted permit application.

Section E – Manure, Litter and Process Wastewater:
If manure is handled as a liquid, and then as a solid and a liquid, do not count the same manure twice. *Example:* A hog facility stores manure slurry in under-floor pits, and then processes the slurry using a solids separator. From the separator, liquids are pumped to a lagoon, then land-applied through a pivot irrigation system; solids are stored on a stacking pad and then transferred to a neighboring farmer for use on his land. The neighboring farmer controls where the solids are land-applied, as well as the rate at which they are applied. In a calendar year, 2 million gallons of manure slurry is pumped from the under-floor pits to the separator. 1.5 million gallons of separated liquid is added to the lagoon, and 250 tons of separated solids are added to the stacking pad. Ultimately, after evaporation/decomposition losses, 1.3 million gallons of waste are applied through the pivot system, and 230 tons of solids are transferred to the neighboring farmer. The permittee would report having generated 1.3 million gallons of liquid/slurry manure, and 230 tons of dry manure. The permittee would report having transferred 0 gallons of liquid/slurry manure, and 230 tons of dry manure.

NOTE: Nutrient Management Plans are not required to be developed or approved by a certified nutrient management planner. This information on this form is being gathered for reporting purposes only.

Section F – Discharge Summary:
Please review the terms and conditions of your permit and authorization letter for additional discharge reporting requirements. Discharges from the production area include, but are not limited to overflows from waste containment structures, inundation of part or all of the production area as a result of

flooding, and accidental waste spillage that occurs during the transfer of wastes from the production area to the land application area (e.g. if a distribution pipe ruptures or a haul truck overturns). Discharges must be reported, even if they did not reach state waters. If a discharge occurs over the course of multiple days (e.g. if a flood occurs and several days go by before the floodwaters recede), include a start date and an end date in the "Date" column. If a discharge occurs over the course of several hours (e.g. if a rupture in a distribution pipe goes undiscovered all morning), indicate the hours during which the discharge took place. Estimate the total volume of waste discharged during the course of each discharge event.

Section G – Certification:

This form must be completed, signed, and certified by an appropriate individual as described under "Permittee Information". This form may not be completed, signed, and certified by a secretary, an office assistant, a hired hand, a private consultant doing work for the permittee, or any other such individual who does not meet the stated criteria.

Montana Department of
ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU

Agency Use
Permit No.:
Date Rec'd
Amount Rec'd
Check No.
Rec'd By

FORM
NMP

Nutrient Management Plan

READ THIS BEFORE COMPLETING FORM: Before completing this form (Form NMP), Concentrated Animal Feeding Operation (CAFO) operators need to read the General Permit, particularly Part IV.A. CAFO operators also need to read the "Instructions For Filling Out Form NMP," found at the back of the Form. Form NMP is intended to help CAFO operators develop a site-specific Nutrient Management Plan, in compliance with Part IV.A of the General Permit and all applicable State rules and statutes. Your Nutrient Management Plan must be maintained at the site as required in Part III of the General Permit. Sections B and C on your Form NMP must state the information exactly the same way as it was stated on the most recently submitted version of your Form 2B. Attach additional pages as necessary, indicating the corresponding section number on this NMP form. For additional help in filling out this form please read the attached instructions. The 2008 General Permit, current fee schedule, and related forms are available from the Water Protection Bureau at (406) 444-3080 or http://www.deq.mt.gov/wqinfo/MPDES/CAFO.asp

Section A - NMP Status *(Check one):*

☐ New — No prior NMP submitted for this site.

☐ Modification — Change or update to existing NMP.

Permit Number: MT _____ (Specify the permit number that was previously assigned to your facility.)

Section B - Facility or Site Information:

Site Name _____

Site Location _____

Nearest City or Town _____ County _____

Section C - Applicant (Owner/Operator) Information:

Owner or Operator Name _____

Mailing Address _____

City, State, and Zip Code _____

Phone Number ( ) _____

Section D - NMP Minimum Elements:

1. Livestock Statistics

Animal Type	*# of Days on Site (per year)*	*Annual Manure Production (cubic yds or gal)*
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

Method used for estimating annual manure production:

2. Manure Handling

Describe manure handling at the facility:

Frequency of Manure Removal from confinement areas:

Is this manure temporarily stored in any location? ☐ Yes ☐ No

If so then how and where?

Is manure stored on impervious surface? ☐ Yes ☐ No

If yes, describe type and characteristics of this surface:

3. Waste Control Structures

Waste Control Structure (name/type)	*Length (ft)*	*Width (ft)*	*Depth (ft)*	*Volume (cubic ft or gallons)*
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

4. Disposal of Dead Animals

Describe how dead animals are disposed of at this facility:

5. Clean Water Diversion Practices

Describe how clean water is diverted from production area:

6. Prohibiting Animals and Wastes from Contact with State Waters
Describe how animals and wastes are prohibited from direct contact with state waters:

7. Chemicals and Contaminants
Describe how chemicals and other contaminants are handled on-site:

8. Best Management Practice (BMPS)
Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's **production area.** Indicate the location of these measures. Include a schedule for implementation of each of these measures. Examples of BMP measures could include but are not limited to: constructing ditches, terraces, and waterways above an open lot to divert clean water run on; installing gutters, downspouts and buried conduits to divert roof drainage; providing more roofed area; decreasing open lot surface area; repairing or adjusting water systems to minimize water wastage; using practical amounts of water for cooling purposes; recycling water if practical and applicable.

Describe in detail all temporary, permanent and structural Best Management Practices (BMPs) which will be used to control runoff of pollutants from facility's **land application area**. Indicate the location of these practices. Include a schedule for implementation of each of these measures. Attached details and specifications may be used to supplement this description. Examples of BMP measures could include but are not limited to: maintaining setbacks from surface waters for manure applications; managing irrigation practices to prevent ponding of wastewater on land application sites; never spray irrigating wastes onto frozen ground; consulting with the Department prior to applying any liquid waste to frozen or snow-covered ground; applying wastes at agronomic rates.

9. Implementation, Operation, Maintenance and Record Keeping – Guidance

The permittee is required to develop guidance addressing implement of NMP, proper operation and maintenance of the facility, and record keeping as described in Part II of the permit.

Has a guidance document been developed for the facility? ☐ Yes ☐ No

Certify the document addresses the following requirements:

Implementation of the NMP:	☐ Yes	☐ No
Facility operation and maintenance:	☐ Yes	☐ No
Record keeping and reporting:	☐ Yes	☐ No
Sample collection and analysis:	☐ Yes	☐ No
Manure transfer:	☐ Yes	☐ No

Provide name, date and location of most recent documentation:

If your answer to any of the above question is no, provide explanation

Section E – Land Application

Will manure be land applied to land either owned, rented, or leased by the owner or operator of the facility?

☐ No If no, then provide an explanation of how animal waste at this site are managed.

☐ Yes If yes, then the information requested in Section E must be provided.

Photos and/or Maps

Attach an aerial photograph or map of the site where manure is to be applied. (Use multiple photos/maps if necessary to show required details.) The photo(s)/map(s) must be printed on no larger than an 11"x17" piece of paper, and must clearly identify the following items:

- Individual field boundaries for all planned land application areas
- A name, number, letter or other means of identifying each individual land application field
- The location of any down-gradient surface waters
- The location of any down-gradient open tile line intake structures
- The location of any down-gradient sinkholes
- The location of any down-gradient agricultural well heads
- The location of all conduits to surface waters
- The specific manure/waste handling or nutrient management restrictions associated with each land application field.
- The soil type(s) present and their locations within the individual land application field(s)
- The location of buffers and setbacks around state surface waters, well heads, etc.

Land Application Equipment Calibration

Describe the type of equipment used to land apply wastes and the calibrating procedures:

Manure Sampling and Analysis Procedures

A representative manure sample will be analyzed a minimum of once annually for Total Nitrogen, and Total Phosphorus. Analysis results will be reported in lbs/ton or lbs/1,000 gal. Results of these analyses will be used in determining application rates for manure, litter, and process wastewater.

Manure Sample collection will occur according to the following method:

☐ The recommended method(s) found in Section 5 of Department Circular DEQ 9

☐ Other (describe) _____

Soil Sampling and Analysis Procedures

A representative soil sample from the top 6 inch layer of soil in each field will be analyzed for phosphorus content at least once every five years. Analyses will be conducted by a qualified laboratory, using the Olsen P test. Results will be reported in parts per million (ppm) and will be used in determining application rates for manure, litter, and process wastewater.

Soil sample collection will occur according to the following method:

☐ The recommended method(s) found in Section 5 of Department Circular DEQ 9

☐ Other (describe) _____

_____

Land Application Data

The following must be filled out for each field to which manure, litter or process wastewater will or may be applied.

Crops and Manure	
Field Name:	
Crop 1	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	
Crop 2	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	
Crop 3	
Irrigated (Y/N)	
Yield Goal (ton/ac or bushel/ac)	
N Content of Harvested Crop (lb/ton or lb/bushel)	
P Content of Harvested Crop (lb/ton or lb/bushel)	
Time of Year When Application will Occur	
Form of manure (liquid/solid)	
Method of Application	
Frequency of Application	

Phosphorus Risk Assessment

The permittee shall assess the risk of phosphorus contamination of state waters. An assessment shall be conducted for each field, under the control of the operator, to which manure, litter or process wastewater will or may be applied. If a new field is added in the future, then the permittee must submit a revised (modified) NMP. The permittee has the option of using either Method A or Method B (below) to complete the assessment. Copies of all tables and calculations used to complete the assessments, as well as the results of the assessments, shall be submitted to the Department and copies shall be maintained on-site at the facility and available for Departmental review. The results of the assessments shall be used to determine the appropriate basis for land application of wastes from the facility.

Method Used

Indicate which method will be used to determine phosphorus application:

☐ Method A – Representative Soil Sample
☐ Method B – Phosphorus Index

Method A – Representative Soil Sample

a) Obtain one or more representative soil sample(s) from the field.
b) Have the sample analyzed for Phosphorus by a qualified lab. The "Olsen P test" must be used for the analysis, and the result must be reported in parts per million (ppm).
c) Using the results of the Olsen P test, determine the application basis according to the Table below

Soil Test	
Olsen P Soil Test Result (ppm)	***Application Basis***
<25.0	Nitrogen Needs Of Crop
25.1 - 100.0	Phosphorus Needs Of Crop
100.0 - 150.0	Phosphorus Needs up to Crop Removal Rate
>150.0	No Application

Method B – Phosphorus Index

a) Complete a Phosphorus Index according to for each crop grown on each field. Complete table in Appendix A to calculate phosphorus index. For information on filling out specific sections Appendix A, please refer to Attachment 2 of Department Circular DEQ 9.
b) Using the calculated Total Phosphorus Index Value, assign the overall site/field vulnerability to phosphorus loss according to the table below.

Total Phosphorus	
Total Phosphorus Index Value	***Site Vulnerability to Phosphorus Loss***
<11	Low
11-21	Medium
22-43	High
>43	Very High

c) Using the calculated Site Vulnerability to Phosphorus Loss, determine the appropriate application basis according to the table below.

Site Vulnerability to Phosphorus Loss	
Site Vulnerability to Phosphorus Loss	***Application Basis***
Low	Nitrogen Needs
Medium	Nitrogen Needs
High	Phosphorus Need Up to Crop Removal
Very High	Phosphorus Crop Removal or No Application

d) The permittee will complete the *Nutrient Budget Worksheet*, below, for each crop grown on each field to which manure or process waste water is or may be applied. A copy of each Nutrient Budget Worksheet will be maintained on site, and a copy will be submitted to the Department.

Nutrient Budget Worksheet			
Site/Field:			
	Nutrient Budget	***Nitrogen-based Application***	***Phosphorus-based Application***
	Crop Nutrient Needs, lbs/acre included in Department Circular DEQ 9		
(-)	Credits from previous legume crops, lbs/acre (from DEQ-9), as applicable		
(-)	Residuals from past manure production, lbs/acre (lbs/acre applied in previous year(s) x fractions listed in DEQ-9)		
(-)	Nutrients supplied by commercial fertilizer and Biosolids, lbs/acre		
(-)	Nutrients supplied in irrigation water, lbs/acre		
	= Additional Nutrients Needed, lbs/acre		
	Total Nitrogen and Phosphorus in manure, lbs/ton or lbs/1,000 gal (from manure test)		
(+)	Nutrient Avalability factor (for Nitrogen based application see DEQ-9, below; for Phosphorus based application use 1.0)		
	= Available Nutrients in Manure, lbs/ton or lbs/1,000 gal		
	Additional Nutrients needed, lbs/acre (calculated above)		
(/)	Available Nutrients in Manure, lbs/ton or lbs/1,000 gal (calculated above)		
	= Manure Application Rate, tons/acre or 1,000 gal/acre		

Comments:

Section F - CERTIFICATION

Permittee Information:

This Form NMP must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

All Permittees Must Complete the Following Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violations. [75-5-633, MCA]

A. Name (Type or Print)	
B. Title (Type or Print)	**C. Phone No.**
D. Signature	**E. Date Signed**

Return the Form NMP, Nutrient Management Plan to:

Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, MT 59620-0901
(406) 444-3080

INSTRUCTIONS FOR

Form NMP - Nutrient Management Plan Associated With Concentrated Animal Feeding Operations

You may need the following items in order to complete this form: A copy of your most recently submitted Form 2B; a copy of Department Circular DEQ 9, "Montana Technical Standards for Concentrated Animal Feeding Operations;" a copy of soil and manure sample analyses; and a calculator.

Please type or print legibly; forms that are not legible or are not complete will be returned.

SPECIFIC ITEM INSTRUCTIONS

Section A – NMP Status:
Check the box that applies and provide the requested information. If Form NMP has not been previously submitted for this site, check the first box (New). If you submitted a Form NMP and the Department returned it to you as deficient or incomplete, check the second box (Resubmitted); if you were notified by the Department that the permit coverage expired and you are now submitting an updated Form NMP, check the third box (Renewal); if there is a change in the facility or site information (Section H), check the last box (Modification). If a Form NMP has been submitted and returned as incomplete, then the permit number appears in the upper right hand corner of the form. If the site is covered under the *General Permit for Concentrated Animal Feeding Operations*, the number is given on the Authorization letter sent to you by the Department. The permit number must be included on any correspondence with the Department regarding this site.

Section B – Facility or Site Information:
The information must be stated exactly the same way as it was stated on the most recently submitted version of your Form 2B.

Section C – Applicant (Owner/Operator) Information:
The information must be stated exactly the same way as it was stated on the most recently submitted version of your Form 2B.

Section D – Waste Management Minimum Elements:

Livestock Statistics: Identify each type of animal confined at your facility. The definition of "type" could include animals of a given species, animals of a given weight class (e.g. piglets, sows), or animals housed for a specific purpose (e.g. dry cows, milking cows).

"Number of days on site per year" means the number of days at least one animal of a given type is held in confinement during any 12-month period.

"Annual manure production" means the volume of manure (from a given animal type) that is stored, land applied, or transferred to other persons during any given 12-month period. When describing the method used to calculate annual manure production, include all formulas, factors, references to tables, and other resources used to calculate manure production. Be sure to account for soiled bedding materials and manure-contaminated runoff water, also considered manure under state regulations.

Manure Removal from Confinement Area, list each confinement area at your facility. For example, pens, freestall barns, hog barns, poultry barns, yard back, calving pens, etc.

"Temporary manure storage areas" may include, but are not limited to, structures such as underground tanks and underfloor pits.

List *all* waste control structures. These may include, but are not limited to, manure lagoons, manure ponds, evaporation ponds, wastewater retention ponds, contaminated runoff retention ponds, settling basins, underground storage tanks, underfloor pits, manure solids stacking pads, composting facilities, and dry-stack facilities. Berms, dikes, concrete curbs, ditches, and waste transfer pipelines are also waste control structures and must be listed, though some of the requested measurements may not apply (e.g. "volume" usually does not apply to a waste transfer pipeline).

Disposal of Dead Animals, please be as specific as possible with the information that you provide. For example, if dead animals are disposed of by burial, the method/practice description should include the fact that they are buried, how quickly after death they are hauled to the burial site, and how quickly they are covered with soil. The method/practice location information should be detailed enough that an inspector could find the site without the need for additional guidance. It may not simply reference a map.

Clean Water Diversion Practices, the practice description does not need to be any more detailed than "berm," "ditch," "grassy swale," etc. The practice location may not simply reference a map.

Prohibiting Animals & Wastes from Contact with State Waters, the practice description does not need to be any more detailed than "fence," "wall," etc. The practice location may not simply reference a map.

Chemicals and Contaminants, list all major chemicals or other contaminants handled on site as part of your CAFO operation. These would include, but are not be limited to, pesticides, herbicides, animal dips, disinfectants, etc. Specify the method of disposal for each chemical/contaminant.

Describe *Best Management Practices* (BMPs) used to control runoff of pollutants from the production area, and land application area. Please note that "production area" means that part of a CAFO that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas. The "animal confinement area" includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables. The "manure storage area" includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles. The "raw materials storage area" includes but is not limited to feed silos, silage bunkers, and bedding materials. The "waste containment area" includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water. Also included in the definition of production area is any egg washing or egg processing facility, and any area used in the storage, handling, treatment, or disposal of mortalities.

If you transfer all of the wastes your CAFO produces, and do not land apply any of it to ground under your operational control, then you will not have any land application area BMPs to describe.

Section E – Land Application:

If all of the manure produced at your facility will be transferred to other persons for use in areas beyond your operational control, then you do not need to provide the information requested in Section E of this form.

Photos and/or Maps:

Manure/waste handling and nutrient management restrictions that must be on the photo/map include buffers and setbacks around state surface waters, well heads, etc.

Nutrient Management and Waste Utilization via Land Application:
The purpose for having two options is to allow you to make use of the valuable technical assistance provided by the USDA's Natural Resources Conservation Service (NRCS), if you should so desire.

Requirements: Land application equipment calibration is essential to ensuring that nutrients are being applied at agronomic rates. Section 5 of Department Circular DEQ 9 contains sample instructions on how to calibrate some types of land application equipment. The instructions in Section 5 of Department Circular DEQ 9 are purely recommendations, other methods may work just as well. When sending manure or soil samples to a laboratory for analysis, it is your responsibility to make sure that the lab uses the correct sampling procedures. You should never just "assume" that they will. It is also your responsibility to make sure that the results of the analysis are reported using the appropriate units of measurement. Before you take any samples, talk to the lab that you intend to use. Ask them if they have specific instructions on how to obtain and submit samples. If they do, then you must follow their instructions in order to help ensure that the analysis results you get are as accurate as possible.

You will most likely need to make and fill out multiple photocopies of "Table 4 – Crops and Manure" For information on how to fill out specific sections of Table 6 – Phosphorus Index, please refer to Attachment 2 of Department Circular DEQ 9.

"Table 9 – Nutrient Budget Worksheet" must be filled out for each crop grown on each field to which manure or process wastewater will or may be applied, regardless of whether Method A has been used or Method B has been used. When filling out Table 9, be sure and refer to nitrogen in terms of pounds of elemental nitrogen. Phosphorus should be referred to in pounds of P_2O_5.

Section F – Certification:
If Form NMP is filled out by one person and signed by another, the person signing the document should read it thoroughly. Always retain a copy of each of the documents that you send to the Department.

If you have any questions concerning how to fill out this form, or other forms related to the Montana Pollutant Discharge Elimination System (MPDES) discharge permitting program, please contact the Department's Water Protection Bureau at:

Phone: (406) 444-3080
Fax: (406) 444-1374
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-0901

Appendix A: Phosphorus Index Worksheet (Complete for each field or crop)

Site/Field:

Site Category Factor	*None (0)*	*Low (1)*	*Medium (2)*	*High (4)*	*Very High (8)*	*Risk Value (0, 1, 2, 4, 8)*	*Weight Factor*	*Weighted Risk*
Soil Erosion	N/A	<5 tons/ac/yr	5-10 ton/ac/yr	10-15 tons/ac/yr	>15 tons/ac/yr		X 1.5	
Furrow Irrigation Erosion	N/A	Tailwater recovery, QS>6 very erodible soils, or QS>10 other soils	QS>10 for erosion resistant soils	QS>10 for erodible soils	QA>6 for very erodible soils		X 1.5	
Sprinkler Irrigation Erosion	All sites 0-3% slope, all sandy sites, or site evaluation indicates little or no runoff, large spray on silts 3-8%	Medium spray on silty soils 3-15% slopes, large spray on silty soils 8-15% slope, low spray on silt soils 3-8%, large spray on clay soil 3-15% slope	Medium spray on clay soils 3-8% slopes, large spray on clay soils >15% slope, medium spray on silt soil >15% slope	Medium spray on clay soils >8% slope, low spray on clay soil 3-8% slope, low spray on silty soils >15% slopes	Low spray on clay soils >8% slopes		X 0.5	
Runoff Class	Negligible	Very Low or Low	Medium	High	Very High		X 0.5	
Olson Soil Test P	--------	<20 ppm	20-40 ppm	40-80 ppm	>80 ppm		X 1.0	
Commercial P Fertilizer Application Method	None Applied	Placed with planter or injected deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during the growing season	Incorporated >3 months before crop or surface applied <3 months before crop emerges	Surface applied >3 months before crop emerges		X 1.0	
Commercial P Fertilizer Application Rate	None Applied	<30 lbs/ac P2O5	31-90 lbs/ac P2O5	91-150 lbs/ac P2O5	>150 lbs/ac P2O5		X 1.0	
Organic P Source Application Method	None Applied	Injected deeper than 2 inches	Incorporated <3 months prior to planting or surface applied during growing season.	Incorporated >3 months before crop or surface applied <3 months before crop.	Surface applied to pasture or >3 months before crop emerges.		X 1.0	
Organic P Application Rate	None Applied	<30 lbs/ac P2O5	31-90 lbs/ac P2O5	91-150 lbs/ac P2O5	>150 lbs/ac P2O5		X 1.0	
Distance to Concentrated Surface Water Flow	>1,000 feet	200-1,000 feet, or functioning grass waterways in concentrated surface water	100-200 feet	<100 feet	0 feet or applications are directly into concentrated surface water flow areas.		X 1.0	
Total Phosphorus Index Value:								